



Winston H. Hickox
Agency Secretary

Air Resources Board

Alan C. Lloyd, Ph.D.
Chairman

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Gray Davis
Governor

March 15, 2002

Mr. Marty Lassen
Johnson Matthey
434 Devon Park Drive
Wayne, Pennsylvania 19087-1816

Dear Mr. Lassen:

The California Air Resources Board (ARB) previously verified that the Continuously Regenerating Technology (CRT) catalyzed diesel particulate filter system reduces emissions of diesel particulate matter (PM) by 85 percent or greater with 1994-2001 model year engine families for on-road applications as a Level 3 retrofit device. The ARB has now reviewed your subsequent request for extending the verification of the CRT filter system to include model year 2002 engines in on-road applications. Based on its evaluation of the 2002 model year certification data, ARB hereby approves the CRT as a Level 3 retrofit device for use diesel engines belonging to engine families listed in Attachment 1.

In addition, ARB is acknowledging your request to reduce the average engine exhaust temperature requirement to be at least 260 degrees Celsius for 40 percent of the operating cycle.

As in the previous verification, the approved engines do not employ exhaust gas recirculation (EGR) and were not certified new with diesel particulate filters.

The aforementioned extension of verification is valid provided the following operating criteria are met:

1. The engine must be operated with a fuel that has a sulfur content of no more than 15 parts per million by weight.
2. The average engine exhaust temperature must be at least 260 degrees Celsius for 40 percent of the operating cycle.

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our Website: <http://www.arb.ca.gov>.

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3. The engine should be well maintained and not consume lubricating oil at a rate greater than that specified by the engine manufacturer.
4. Johnson Matthey must install a backpressure monitor and indicator light on all vehicles retrofitted with a CRT filter system.

Since there may be significant variations from application to application, Johnson Matthey has indicated that it will review actual vehicle operating conditions and perform temperature datalogging prior to retrofitting a vehicle with the CRT filter system to ensure compatibility.

The ARB estimates that the CRT filter system will incur no discernible fuel economy penalty when used in a compatible application.

After reviewing the submitted data, the ARB does not find that the CRT filter system has an appreciable effect on overall emissions of oxides of nitrogen.

Thank you for participating in ARB's diesel retrofit verification program. Should you have any questions or comments, please contact Ms. Annette Hebert, Chief, Heavy-Duty Diesel In-Use Strategies Branch, at (626) 575-6973.

Sincerely,

//s//

Robert H. Cross, Chief
Mobile Source Control Division